

# CERTIFICATE OF ANALYSIS

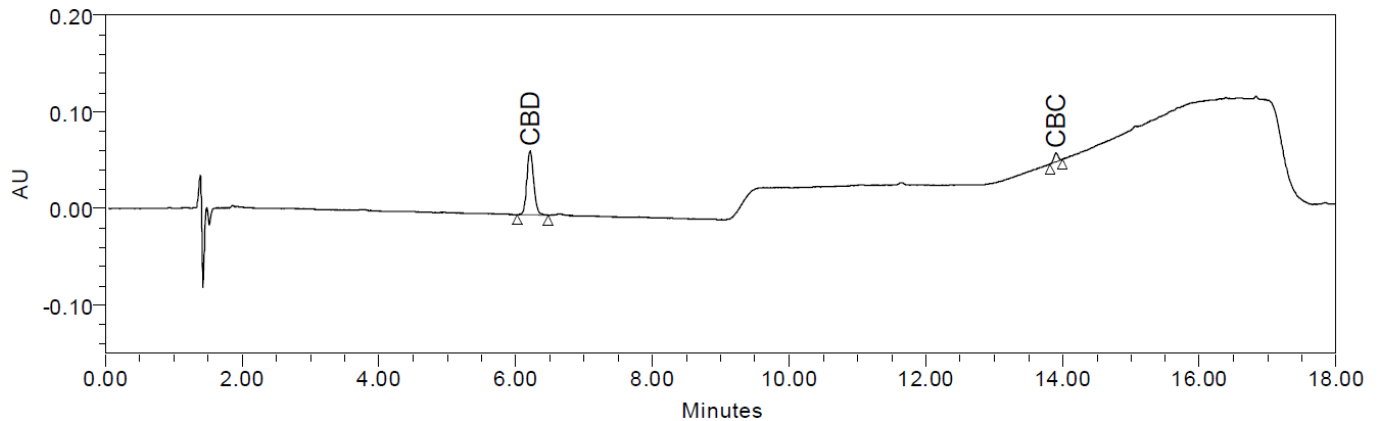
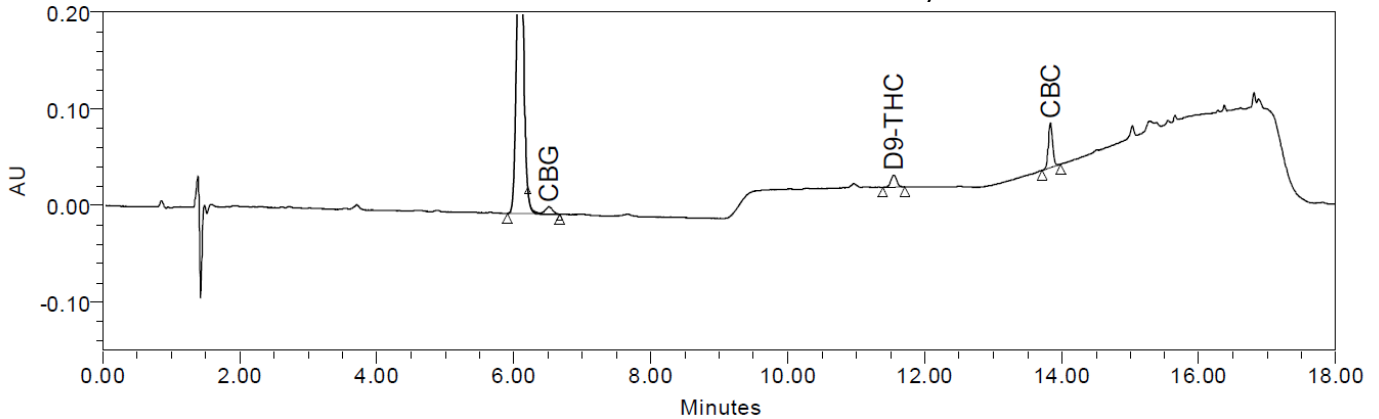


12661 HOOVER STREET GARDEN GROVE, CA 92841 | P. 714-754-4372 | F. 714-668-9972 | WWW.ALKEMIST.COM

**Report Issued To:** Vital Plan, Inc.  
1122 Oberline Rd ; Suite 232  
Raleigh NC 27605-1137  
USA

**Sample Name:** Full-Spectrum Hemp Oil - 1200mg (Peppermint)  
**Description:** Finished product; 30ml fluid [brown tincture bottle]  
**Lot #:** 200715A  
**AL #:** 20234YEO\_1  
**Analysis ID:** 141564  
**Received:** 08/21/20

## Determination of Cannabinoids Content by HPLC



Ret. Time (min)	Compound Name	Prep 1 (%)	Prep 2 (%)	Average (%)	mg per mL	Specification	Result
3.8	Cannabidivarin (CBDV)	0.056	0.049	0.052	0.495	N/A	N/A
4.7	Cannabidivarinic Acid (CBDVA)	ND	ND	ND	ND	N/A	N/A
6.4	Cannabidiol (CBD)	4.621	4.665	4.643	43.927	NLT 40mg/1mL	Pass
6.8	Cannabigerol (CBG)	0.138	0.143	0.141	1.330	N/A	N/A
7.2	Tetrahydrocannabidivarin (THCV)	ND	ND	ND	ND	N/A	N/A
8.0	Cannabidiolic Acid (CBDA)	ND	ND	ND	ND	N/A	N/A
10.3	Cannabigerolic Acid (CBGA)	ND	ND	ND	ND	N/A	N/A
10.5	Cannabinol (CBN)	ND	ND	ND	ND	N/A	N/A
11.8	$\Delta^9$ -Tetrahydrocannabinol ( $\Delta^9$ -THC)	0.161	0.164	0.162	1.536	N/A	N/A
12.4	$\Delta^8$ -Tetrahydrocannabinol ( $\Delta^8$ -THC)	ND	ND	ND	ND	N/A	N/A
14.0	Cannabichromene (CBC)	0.185	0.188	0.187	1.766	N/A	N/A
15.2	$\Delta^9$ -Tetrahydrocannabinolic Acid (THCA-A)	ND	ND	ND	ND	N/A	N/A
Total THC (THCA-A * 0.877 + $\Delta^9$ -THC)		0.161	0.164	0.162	1.536	N/A	N/A
Total Phytocannabinoids		5.162	5.208	5.185	49.053	N/A	N/A

**Analysis Date :** 08/26/20  
**Rev 1:** AP 09/30/20

**Analyzed By:** A Pham

**Authorized By:** Celine Deneuve,  
Analytical Chemistry Supervisor

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**Chromatographic Conditions:**

Method: ATM-815-0300  
Column: AP253 Kinetex 2.6 $\mu$ m C18 100A (150 x 4.6 mm)  
Temperature: 30°C  
Flow Rate: 1 mL/min  
Injection Volume: 5  $\mu$ L  
UV Detection: 228 nm  
Mobile Phase: 0.1% Formic Acid in Water  
0.1% Formic Acid in Methanol:Acetonitrile (75:25)  
HPLC Instrument: Alliance\_1

**Sample Preparation:**

Transferred about 125 mg of sample to a 25 mL volumetric flask and filled to volume with methanol. Vortexed 30 seconds and sonicated 15 minutes at room temperature. Diluted 1:5 in methanol. Filtered through 0.2  $\mu$ m syringe filter into an HPLC vial for analysis.

**Report Summary:**

Conclusion: This "Full-Spectrum Hemp Oil - 1200mg (Peppermint)" test sample contains an average of 44 mg CBD per mL.  
OOS Reference: N/A  
Density: 946.10 mg/mL  
Note: ND = not detected  
Empower Data: 23820 Cannabinoids  
Rev 1: Corrected lot number from "20071SA" to "200715A"

**Analysis Date : 08/26/20**  
**Rev 1: AP 09/30/20**

**Analyzed By: A Pham**

**Authorized By: Celine Deneuve,**  
**Analytical Chemistry Supervisor**

**Vital Plan**

AZ 85022  
ryan.burke@vitalplan.com  
(336) 708-6774  
Lic. #

**Sample: 2008DEL0988.3644**

Strain: Green Cherry  
Lot#: 200715A; Batch#: 200715A; Batch Size: - grams  
Sample Received: 08/21/2020; Report Created: 08/24/2020  
Testing Completed: 08/23/2020

**Full Spectrum Hemp Oil (Peppermint) - 1200mg**

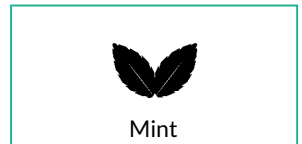
Ingestible, Tincture, CO2  
Lab Internal ID: Please do not include Peppermint terpenes (added as flavoring)



**Terpenes**

Analyte	LOQ PPM	Mass PPM	Mass %
α-Pinene	25	38	0.00
Camphene	26	<LOQ	<LOQ
β-Myrcene	26	33	0.00
β-Pinene	26	47	0.00
δ-3-Carene	27	<LOQ	<LOQ
α-Terpinene	27	<LOQ	<LOQ
trans-Ocimene	28	<LOQ	<LOQ
δ-Limonene	28	100	0.01
p-Cymene	27	<LOQ	<LOQ
cis-Ocimene	28	<LOQ	<LOQ
Eucalyptol	30	200	0.02
γ-Terpinene	28	<LOQ	<LOQ
Terpinolene	28	<LOQ	<LOQ
Linalool	26	38	0.00
Isopulegol	24	81	0.01
Menthol	6	610	0.06
Geraniol	44	71	0.01
β-Caryophyllene	25	230	0.02
α-Humulene	25	71	0.01
cis-Nerolidol	28	60	0.01
trans-Nerolidol	22	38	0.00
Guaiol	27	31	0.00
α-Bisabolol	22	62	0.01

**Primary Aromas**



**0.17%**  
**1,733 PPM**  
Total Terpenes

LOQ = Limit of Quantitation; The reported result is based on a sample weight with the applicable moisture content for that sample; Unless otherwise stated all quality control samples performed within specifications established by the Laboratory. ND = Not Detected; NT = Not Tested; NR = Not Reported



# Test report

Order number: 37464

PO reference:

Entry date: 21-Aug-2020

Vital Plan, Inc.  
1122 Oberlin Road  
Suite 232  
Raleigh NC 27605  
UNITED STATES

Union, 31-Aug-2020

## Sample ID: US-37464-1

Description: Full-Spectrum Hemp Oil - 1200mg (lot# 200715A)

Matrix: Supplement      Weight: 78 g      Status: liquid, not cooled      Packaging: glass bottle

### Test procedure and results

Parameter	Value	Unit	LOD	LOQ	Method reference	Release Date
beta-Lactoglobulin	<LOD	ppb	1.5	10.0	US-AgraQuant ELISA Allergen Test Kit	28-Aug-2020
Cod Parvalbumin Protein (Fish)	<LOD	ppm	1.4	2.0	US-AgraQuant ELISA Allergen Test Kit	27-Aug-2020
Egg	<LOD	ppm	0.5	1.0	US-AgraQuant ELISA Allergen Test Kit	26-Aug-2020
Gluten	<LOD	ppm	3.0	5.0	US-RIDASCREEN Gliadin Test Kit	27-Aug-2020
Mollusk Protein	<LOD	ppm	0.7	* 1.0	US-Mollusk ELISA	25-Aug-2020
Peanut	<LOD	ppm	0.1	1.0	US-AgraQuant ELISA Allergen Test Kit	31-Aug-2020
Soy-Trypsin-Inhibitor protein	<LOD	ppb	16.0	40.0	US-AgraQuant ELISA Allergen Test Kit	28-Aug-2020
Tropomyosin Protein (Crustacea)	<LOD	ppb	4.5	100.0	US-AgraQuant ELISA Allergen Test Kit	27-Aug-2020

\*The test results obtained are not covered by our current A2LA Accreditation.

<LOD = less than limit of detection. A results of <LOD implies that the food allergen of interest was not detected in your product.

Best regards,



Jolene Rigg  
Laboratory Specialist

*All reports on the sample analyses apply only to the samples submitted. Reports are not a guarantee of quality of the material of product from which the samples were taken for submission for analysis. This report and any attached files are confidential and legally privileged to submitter only. Results are only reported to the person or persons submitting samples unless instructed otherwise. It is prohibited to reference Romer Labs, any of its affiliates or any employee in conjunction with these results, with transmitted testing reports or sample certificates or any similar data in any oral or written presentation, publication or without prior written consent from Romer Labs.*

000003-LWI-Sample Receipt and Log In      000095-FORM-Test Report Analysis Form      Measurement Uncertainty calculations provided upon request  
Test report ID: US37464\_20200831-213427

**Romer Labs Inc.**

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